9-12.E.1.1 Students are able to **explain** how elements and compounds **cycle** between living & non-living systems.

Webb Level: 2
Bloom: Comprehension

Verbs Defined:
Explain – give details

Key Terms Defined:
Elements – nitrogen, carbon and oxygen
Compounds – water, carbon dioxide, carbonates, ammonia, nitrates, and nitrites

Teacher Speak:
Students will be able to explain (give details) how elements (nitrogen, carbon and oxygen) and compounds (water, carbon dioxide, carbonates, ammonia, nitrates, and nitrites) cycle between living and non-living systems.

Student Speak:
I can give details (explain) of how nitrogen, carbon and oxygen (elements) and water, carbon dioxide, carbonates, ammonia, nitrates, and nitrites (compounds) cycle between living and non-living systems.

9-12.E.1.2. Students are able to **describe** how atmospheric chemistry may affect global climate.

Webb Level: 2

Bloom: Application

Verbs Defined:
Describe – tell in words or numbers

Key Terms Defined:
Atmospheric chemistry -- various processes of atmospheric chemical changes and cycles such as the greenhouse effect and ozone fluctuations
Global climate -- the overall patterns of meteorological conditions of the earth

Teacher Speak:
Students will be able to describe (tell in words or numbers) how atmospheric chemistry (various processes of atmospheric chemical changes and cycles such as the greenhouse effect and ozone fluctuations) may affect global climate (the overall patterns of meteorological conditions of the earth).

Student Speak:
I can tell in words or numbers (describe) how various processes of atmospheric chemical changes and cycles such as the greenhouse effect and ozone fluctuations (atmospheric chemistry) may affect the overall patterns of meteorological conditions of the earth (global climate).

9-12.E.1.3. Students are able to **assess** how human activity has changed the land, ocean, and atmosphere of Earth.

Webb Level: 3
Bloom: Analysis

Verbs Defined:
Assess- estimate

Key Terms Defined:
Human activity- pollution, combustion reactions, forest cover changes, urban growth and agriculture

Teacher Speak:
Students will be able to assess (estimate) how human activity (pollution, combustion reactions, forest cover changes, urban growth and agriculture) has changed the land, ocean, and atmosphere of Earth.

Student Speak:
I can estimate (assess) how pollution, combustion reactions, forest cover changes, urban growth and agriculture (human activity) have changed the land, ocean, and atmosphere of Earth.

9-12.E.2.1 Students are able to **recognize** how Newtonian mechanics can be applied to the study of the motions of the solar system.

Webb Level: 2
Bloom: Comprehension

Verbs Defined:
Recognize – select from given information based on prior knowledge

Key Terms Defined:
Newtonian mechanics – Newton's law of inertia and universal gravitation
Motions of solar system – rotation and revolution of planets and other objects in the solar systems

Teacher Speak:
Students will be able to recognize (select from given information based on prior knowledge) how Newtonian mechanics (Newton's law of inertia and universal gravitation) can be applied to the study of the motions of the solar system (rotation and revolution of planets and other objects in the solar systems).

Student Speak:
I can select from given information based on prior knowledge (recognize) how Newton's law of inertia and universal gravitation (Newtonian mechanics) can be applied to the study of the rotation and revolution of planets and other objects in the solar systems (motions of solar system).